



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,938	07/03/2001	Norbert Coenen	2209.879 (WSC-2130)	1947

21878 7590 06/26/2002

KENNEDY COVINGTON LOBDELL & HICKMAN, LLP
100 N TRYON STREET
BANK OF AMERICA CORPORATE CENTER
CHARLOTTE, NC 28202-4006

EXAMINER

LE, DANG D

ART UNIT PAPER NUMBER

2834

DATE MAILED: 06/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,938

Applicant(s)

COENEN, NORBERT

Examiner

Dang D Le

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazeki et al. in view of Schob et al. (6,249,067).

Regarding claim 1, Nakazeki et al. show a rotor spinning device (Figure 1) comprising a contact less, passive, radial bearing for the spinning rotor and a damping device for damping radially directed oscillations of the spinning rotor, the damping device comprising a sensor arrangement (5X, 5Y), a control arrangement (7x, 7y) and an operating arrangement (2), the operating arrangement (2) having at least two stationary magnetic operating elements (2x, 2y) arranged to act at least at one active site directly on a magnetic element fixedly connected with the rotor shaft (1) for rotation therewith.

Nakazeki et al. do not show the rotating magnetic element comprising an operative element of the passive bearing of the spinning rotor. Nakazeki et al. Just show the shaft.

Schob et al. show the rotating magnetic element comprising an operative element (10) of the passive bearing of the spinning rotor for the purpose of making a magnetic bearing.

Since Nakazeki et al. and Schob et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include the rotating magnetic element with an operative element of the passive bearing of the spinning rotor as taught by Schob et al. for the purpose discussed above.

Regarding claim 2, it is noted that Nakazeki et al. also show the sensor device at the active site comprising at least two sensor elements (5x, 5y) for detecting radial position deviations of the rotor shaft, and the sensor elements and the operating elements at the active site are arranged in a plane extending vertically in respect to the axis of rotation.

Regarding claim 3, it is noted that Nakazeki et al. also show the operating elements (2x and opposite of 2y) being arranged with an angular offset in respect to the sensor elements of the active site.

Regarding claim 4, it is noted that Nakazeki et al. also show the two operating elements being arranged angularly offset by 90 degrees in respect to each other, and the two sensor elements are arranged angularly offset by 90 degrees in respect to each other.

Regarding claim 5, it is noted that Nakazeki et al. also show an additional operating element (opposite 2x and 2y) being assigned to each operating element and being located diametrically opposite in respect to the axis of rotation, and that each operating element and the additional operating element act in the same direction and with an essentially equal force on the rotating magnetic element.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazeki et al. in view of Schob et al. (6,249,067) as applied to claim 1 above, and further in view of Osama et al.

Regarding claim 6, the device of Nakazeki et al. modified by Schob et al. shows all of the limitations of the claimed invention including the rotating magnetic element comprising a permanent magnet ring enclosing the rotor shaft except for the operating elements being arranged at an axial distance in front of the permanent magnet ring.

Osama et al. show the operating elements (Figure 6) being arranged at an axial distance in front of the permanent magnet ring for the purpose of creating an axial force on the bearing.

Since Nakazeki et al., Schob et al. and Osama et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to arrange the operating elements at an axial distance in front of the permanent magnet ring as taught by Osama et al. for the purpose discussed above.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazeki et al. in view of Schob et al. (6,249,067) as applied to claim 1 above, and further in view of Quinn.

Regarding claim 7, the device of Nakazeki et al. modified by Schob et al. shows all of the limitations of the claimed invention except for the control device comprising elements for an exclusively capacitive coupling of the signals generated by the sensor elements.

Quinn shows the control device (Figure 3) comprising elements for an exclusively capacitive coupling (C1) of the signals generated by the sensor elements (28) for the purpose of controlling the motor operation.

Since Nakazeki et al., Schob et al. and Quinn are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include in the control device with elements for an exclusively capacitive coupling of the signals generated by the sensor elements as taught by Quinn for the purpose discussed above.

Information on How to Contact USPTO

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

Application/Control Number: 09/898,938
Art Unit: 2834

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

DDL
June 22, 2002

DL

Foray KL